

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1 – 27 (Cancelled)

28. (Previously Presented) A method for managing data that may be replicated from one or more volumes of data that are part of a first volume group on a first computer system having a first operating system, the method comprising the computer-executed steps of:

discovering logical information related to the one or more volumes of data that are part of the first volume group on the first computer system;

creating a map of the logical information to physical devices on the first computer system, the map comprising:

information identifying one or more devices associated with one or more physical volumes containing the data; and

information providing definition and structured layout of volume groups, internal logical volumes and file systems on the first computer system;

using the map to create a second volume group on a second computer system having a second operating system, where the logical configuration of the second volume group is substantially identical to the logical configuration of the first volume group; and

using the map to reconstruct on the second computer system the internal logical volumes and file systems of the first computer system and mount a duplicate of the one or more volumes of data on the second computer system.

29. (Previously Presented) The method of claim 28, wherein the first and second operating systems are selected from the group consisting of IBM AIX, Sun Solaris, and HP UX, and the computer-executed steps may be performed substantially independent of which operating system is selected from the group.

30. (Previously Presented) The method of claim 29, wherein the map is configured as a flat file that is converted into a tree structure and further comprising the computer-executed step of using the tree structure to verify the accuracy of the information related to the volume group and the other logical information.

31. (Previously Presented) The method of claim 30, wherein the tree structure is converted back into a map that is sent to the second computer system.

32. (Previously Presented) The method of claim 31, further comprising the computer-executed step of building a second volume group on the second computing system that is a substantial copy of the first volume group on the first computing system including volume layout and file system structure as defined by mapping information originally built on the first computer system.

33. (Previously Presented) The method of claim 32, further comprising the computer-executed steps of:

establishing one or more mirrored copies of data that are copies of one or more volumes of data that are part of the first volume group; and
separating the one or more mirrored copies of data from the respective one or more volumes of data.

34. (Previously Presented) The method of claim 33, further comprising the computer-executed step of mounting the separated one or more mirrored copies of data on the first or second computer system using the second volume group.

35. (Previously Presented) The method of claim 34, wherein the first and second computer system are combined.

36. (Previously Presented) The method of claim 34, further comprising the computer-executed step of:

dismounting the separated one or more mirrored copies from the second computer system.

37. (Previously Presented) The method of claim 33, further comprising the computer-executed step of:

backing up the separated one or more mirrored copies of data to a backup medium.

38. (Previously Presented) The method of claim 37, further comprising the computer-executed step of:

restoring one or more volumes of data from the backup medium or from the one or more mirrored copies of data that are copies of the one or more volumes of data.

39. (Previously Presented) The method of claim 33, wherein the respective one or more volumes of data that are part of the first volume group on the first computer system are further associated with a first software application.

40. (Previously Presented) The method of claim 39, wherein a second software application is provided on the second computer system and the separated one or more mirrored

copies of data on the second computer system are associated with the second software application.

41. (Previously Presented) The method of claim 40, further comprising the computer-executed step of:

backing up the separated one or more mirrored copies of data to a backup medium.

42. (Previously Presented) The method of claim 41, wherein the second software application has an associated database and the step of backing up the separated one or more mirrored copies of data to a backup medium includes backing up the associated database.

43. (Previously Presented) The method of claim 42, wherein there is a set of information associated with the database, the set of information comprising at least one type of information selected from the group consisting of tablespaces, archive logs, redo logs, and control files, and wherein at least some of the set of information associated with the database is backed up to the backup medium during the backup step.

44. (Previously Presented) The method of claim 43, further comprising the step of:

restoring, from the separated one or more mirrored copies of data, the respective one or more volumes of data associated with the separated one or more mirrored copies of data , and

wherein at least some of the set of information associated with the database is used during this step.

45. (Currently Amended) A computer system for managing data that may be replicated from one or more volumes of data, the computer system comprising:
a data storage system including a plurality of storage devices;
first and second computer systems in communication with the data storage system, the first computer system having a first operating system and the second computer system having a second operating system, wherein the first computer system has data that may be replicated from one or more volumes of data that are part of a first volume group on the first computer system;
and

computer-executable logic that enables the method steps of:

discovering logical information related to the one or more volumes of data that are part of the first volume group on the first computer system;
creating a map of the logical information to physical devices on the first computer system the map comprising:

information identifying the devices associated with one or more physical volumes containing the data; and,
information providing definition and structured layout of the volume groups, internal logical volumes and file systems on the first computer system;

using the map to create a second volume group on a second computer system having a second operating system, where the logical configuration of the second volume group is substantially identical to the logical configuration of the first volume group; and using the map to reconstruct on the second computer system the internal logical volumes and file systems of the first computer system and mount a duplicate of the one or more volumes of data on the second computer system having a second operating system.

46. (Previously Presented) The system of claim 45, wherein the first and second operating systems are selected from the group consisting of IBM AIX, Sun Solaris, and HP UX, and the computer-executed steps may be performed substantially independent of which operating system is selected from the group.

47. (Previously Presented) The system of claim 46, wherein the map is configured as a flat file that is converted into a tree structure and further comprising the computer-executed step of using the tree structure to verify the accuracy of the information related to the volume group and the other logical information.

48. (Previously Presented) The system of claim 47, wherein the tree structure is converted back into a map that is sent to the second computer system.

49. (Previously Presented) The system of claim 48, further comprising the computer-executed step of building a second volume group on the second computing system that is a substantial copy of the first volume group on the first computing system.

50. (Previously Presented) The system of claim 49, further comprising the computer-executed steps of:

establishing one or more mirrored copies of data that are copies of one or more volumes of data that are part of the first volume group; and

separating the one or more mirrored copies of data from the respective one or more volumes of data.

51. (Previously Presented) The system of claim 50, further comprising the computer-executed step of mounting the separated one or more mirrored copies of data on the first or second computer system using the second volume group.

52. (Previously Presented) The system of claim 51, wherein the first and second computer system are combined.

53. (Previously Presented) The system of claim 51, further comprising the computer-executed step of:

dismounting the separated one or more mirrored copies from the second computer system.

54. (Previously Presented) The system of claim 49, further comprising the computer-executed step of:

backing up the separated one or more mirrored copies of data to a backup medium.

55. (Previously Presented) The system of claim 50, further comprising the computer-executed step of:

restoring one or more volumes of data from the backup medium or from the one or more mirrored copies of data that are copies of the one or more volumes of data.

56. (Previously Presented) A program product for use with a data storage system having a plurality of storage devices and which is in communication with first and second computer systems, the program product being for management of data and being comprised of:

computer-executable logic contained on a computer-readable medium and which is configured for causing the following computer-executed steps to occur:

establishing one or more mirrored copies of data that are copies of one or more volumes of data that are part of a first volume group on a first computer system having a first operating system;

separating the one or more mirrored copies of data from the respective one or more volumes of data;

discovering logical information related to the one or more volumes of data that are part of the volume group on the first computer system;

creating a map of the logical information to physical devices on the first computer system, the map comprising:

information identifying the devices associated with one or more physical volumes containing the data; and

information providing definition and structured layout of the volume groups, internal logical volumes and file systems on the first computer system;

using the map to create a second volume group on a second computer system having a second operating system, where the logical configuration of the second volume group is substantially identical to the logical configuration of the first volume group; and

using the map to reconstruct on the second computer system the internal logical volumes and file systems of the first computer system and mount a duplicate of the one or more mirrored copies of data on the second computer system.

57. (Previously Presented) The program product of claim 56, wherein the map further comprises: information identifying the one or more separated mirrored copies of the data; and information identifying the physical address(es) of the mirrored copies.

58. (Previously Presented) The program product of claim 56, wherein the first operating system is different from the second operating system.

59. (Currently Amended) The method of claim 28 [[1]], wherein the map further comprises at least one set of information selected from the group consisting of information relating to one or more filesystems associated with the volumes of data, device serial number, physical address, volume group, logical volume name, file type, and mount point.

60. (Currently Amended) The method of claim 28 [[1]], wherein the first operating system is different from the second operating system.

61. (Currently Amended) The method of claim 28 [[1]], wherein the first operating system is substantially the same as the second operating system.

62. (Currently Amended) The method of claim 28 [[1]], wherein the first computer system is a separate and distinct computer system from the second computer system.

63. (Currently Amended) The method of claim 28 [[1]], further comprising creating volume group, logical volume, and file system objects on the second computer system.

64. (Previously Presented) The method of claim 33, wherein the map further comprises: information identifying the one or more separated mirrored copies of the data; and information identifying the physical address(es) of the mirrored copies.

65. (Previously Presented) The computer system of claim 45, wherein the first operating system is different from the second operating system.

66. (Previously Presented) The computer system of claim 45, wherein the first operating system is substantially the same as the second operating system.

67. (Previously Presented) The computer system of claim 45, wherein the first computer system is a separate and distinct computer system from the second computer system.

68. (Previously Presented) The method of claim 50, wherein the map further comprises: information identifying the one or more separated mirrored copies of the data; and information identifying the physical address(es) of the mirrored copies.